

# Chapter 1

## Basic Setup

The NETGEAR 54 Mbps Wireless PC Card WG511v2 lets you connect a PC computer to wireless networks. It is designed for PC computers running Microsoft Windows. For information about product features and compatible NETGEAR products, see the NETGEAR website at <http://www.netgear.com>.

This chapter describes how to install your NETGEAR 54 Mbps Wireless PC Card WG511v2 and set up basic wireless connectivity on your Wireless Local Area Network (WLAN). Advanced wireless network settings are covered in [Chapter 2, “Network Connections and Wireless Security”](#) in this manual.

### What You Need Before You Begin

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You must verify that your computer meets the minimum system requirements and identify the wireless network settings of the WLAN where you will connect before you can set up your wireless PC card and connect.

### Verify System Requirements

Before installing the NETGEAR 54 Mbps Wireless PC Card WG511v2, please make sure that these minimum requirements have been met. You must have a laptop computer with:

- A Pentium® Class notebook computer with an available CardBus slot.
- A CD drive.
- 5 MB of free hard disk space.
- Windows XP Home, XP Professional, Vista, or Windows 2000.
- Some versions of Windows may ask for the original Windows operating system installation files to complete the installation of the WG511v2 driver software.

## Observe Wireless Location and Range Guidelines

Computers can connect over wireless networks indoors at a range which vary significantly based on the physical location of the computer with the NETGEAR 54 Mbps Wireless PC Card WG511v2. For best results, avoid potential sources of interference, such as:

- Large metal surfaces
- Microwaves
- 2.4 GHz Cordless phones

In general, wireless devices can communicate through walls. However, if the walls are constructed with concrete, or have metal, or metal mesh, the effective range will decrease if such materials are between the devices.

## What Is in the Box

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The product package should contain the following items:

- NETGEAR 54 Mbps Wireless PC Card WG511v2
- *Installation Guide for the NETGEAR 54 Mbps Wireless PC Card WG511v2*
- *NETGEAR 54 Mbps Wireless PC Card WG511v2 Resource CD*, including:
  - Driver and Smart Wizard Software
  - NETGEAR 54 Mbps Wireless PC Card WG511v2 User Manual
- Warranty card
- Support information card

If any of the parts are incorrect, missing, or damaged, contact your NETGEAR dealer. Keep the carton, including the original packing materials, in case you need to return the product for repair.

## WG511v2 Default Wireless Settings

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If this is a new wireless network installation, use the factory default settings to set up the network and verify wireless connectivity. If this is an addition to an existing wireless network, you will need to identify the wireless network and wireless security settings that are already defined.

Your NETGEAR 54 Mbps Wireless PC Card WG511v2 factory default basic settings are:

- Network Name Service Set Identification (SSID): **Any** (First available network)



**Note:** In order for the WG511v2 Wireless PC Card to communicate with a wireless access point or wireless adapter, all devices must be set up to use the same wireless network name (SSID).

- Network Mode (Infrastructure or Ad-hoc): **Infrastructure**
- Data security WEP or WPA-PSK encryption: **Disabled**

The section below provides instructions for setting up the NETGEAR 54 Mbps Wireless PC Card WG511v2 for basic wireless connectivity to an access point. The procedures below provide step-by-step installation instructions for Windows PCs. Use the procedure that corresponds to the version of Windows that you are using.

## Installation Instructions

The instructions in this chapter explain how to install the WG511v2 to connect to a network with an access point or router. Wireless security, advanced settings, and Computer-to-Computer (Ad Hoc) instructions are covered in [Chapter 2, “Network Connections and Wireless Security”](#).

Follow these instructions to install the WG511v2 Wireless PC Card.

1. First, install the WG511v2 software.

Insert the NETGEAR CD. If the CD main page does not appear, double click Autorun.exe on the CD.

- a. Click Install the Software. The Check for Updates window opens.
- b. If you are connected to the Internet, click Check for Updates. If not, you can choose to install from the CD.
- c. When the Installation Complete message appears, click Next.



Figure 1-1

2. Now, insert the wireless PC card.
  - a. When prompted, insert your wireless PC card.

You will be prompted to select the country where you are located.
  - b. Select the country and click Agree.



Figure 1-2

3. Use the Smart Wizard to set up your wireless PC card.
  - a. Windows 2000, ME or 98 users go to Step b. Windows XP or Vista users can set up the wireless adapter either with the NETGEAR Smart Wizard (recommended) or the Windows Configuration Utilities
    - **NETGEAR Smart Wizard:** Reveals more information about each network and makes it easier to troubleshoot network connection problems.
    - **Windows Configuration Utility:** See the Windows documentation or the link to [“Windows XP and Vista Wireless Configuration Utilities”](#) in Appendix B.



Figure 1-3

- b. Click Next to accept the NETGEAR Smart Wizard.

You will be prompted to let the wizard help you connect to a network (recommended).

- c. Click Next to accept.



Figure 1-4

4. Connect to a wireless network.

- a. Select the wireless network from the drop-down list, and the wizard records your choice.

Hidden networks do not broadcast the Network Name (SSID). These networks are included in the drop-down list, but the Network Name (SSID) is blank.

If the network uses security, the Smart Wizard detects it.

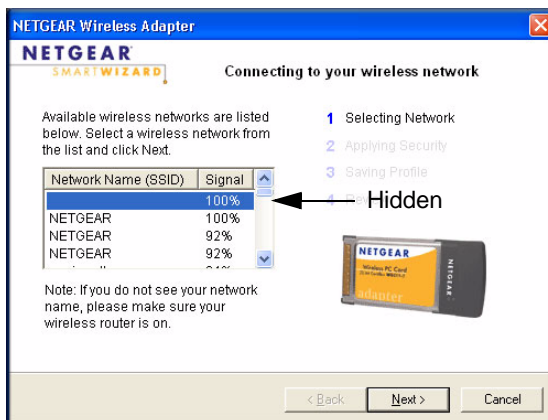



Figure 1-5

- b. Follow the Wizard steps for Security (if used) and for saving a Profile.  
c. After you have reviewed the settings, click Finish.

The WG511v2 icon  appears in the system tray and on the desktop. The wizard initiates your wireless connection. It could take up to a minute for your wireless connection to be established.

The Smart Wizard Settings page opens.

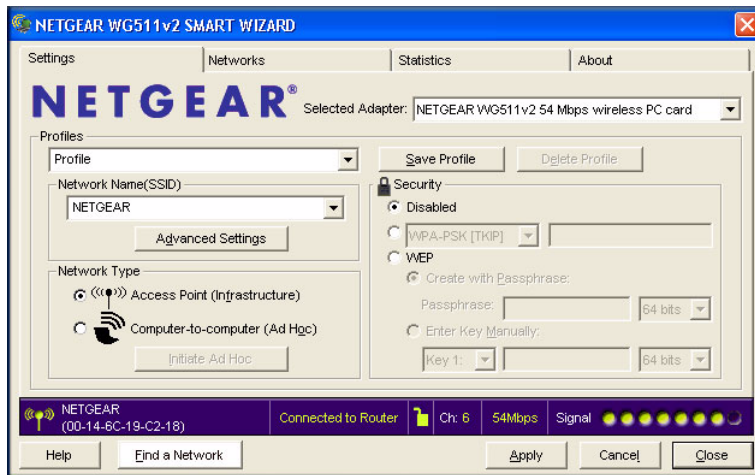



Figure 1-6

5. Use the status bar to verify your wireless connectivity.


For more details about connecting, see [“Connecting to Wireless Networks and the Internet”](#) on page 1-6.

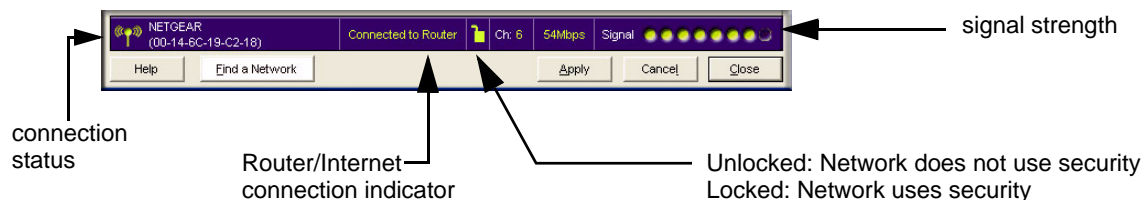
## Connecting to Wireless Networks and the Internet

The WG511v2 has indicators in three locations that show the status of your connection to a wireless network and to the Internet:

- **WG511v2 Icon:** After you install the WG511v2 software, the  icon appears on the desktop and in the lower right of the Windows task bar. It is color coded to show the status of the connection.
- **Smart Wizard Status Bar:** Clicking on the system tray icon opens the Smart Wizard. The status bar at the bottom of the page shows details about your wireless and Internet connection. See [“The Smart Wizard Status Bar”](#) on page 1-7.
- **WG511v2 Wireless PC Card LEDs:** The two LEDs on the wireless card show the speed of the network connection.

## The Smart Wizard Status Bar

Click the  icon to open the Smart Wizard so you can view the status bar. The Smart Wizard Settings page opens.



**Figure 1-7**

- **Connection Status:** The color shows the connection status.
- **Signal Strength:** Shows the signal strength of the wireless network. If the signal is poor, then try moving closer to the wireless access point.
- **Lock icon:** Shows if security is used on the network.
- **Router/Internet Connection Indicator:** This shows the progress of your connection. By default, this feature is on.

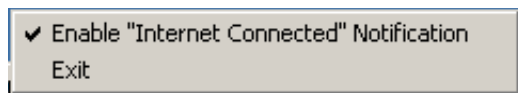


**Figure 1-8**

This connection indicator is useful in isolating a problem. For example, if you are connected to a router, but not to the Internet, then check the router's Internet connection.

Connection Indicator	Description
Connected to Internet or IP Address	Wireless Internet connection is OK.
Connected to Router	Wireless connection to router is OK but no Internet connection at router.
____.____.____.____ or 169.254..x.x	Wireless connection to a router is OK but there is a problem with the router. See <a href="#">Chapter 3, "Troubleshooting"</a> .




If you right-click in the system tray icon, you can disable the Internet notification feature by clearing check mark on this line. If you do so, then only the IP address is shown.



**Figure 1-9**

## WG511v2 Icon Colors

The WG511v2 icon is on the desktop and in the Windows System Tray (SysTray). The System Tray resides on one end of the taskbar in the Microsoft Windows desktop.

Color	Condition	Description
Red 	The wireless PC Card has no connection to any other wireless node.	The wireless PC Card is not able to link to any other wireless node or the link is lost. Check your configuration or try moving to a location where the wireless signal quality is better.
Yellow 	The wireless PC Card has a connection with another wireless node.	The wireless link is weak. You may need to move to a better spot, such as closer to the wireless access point. Also, look for possible interference such as a 2.4 GHz cordless phone or large metal surface.
Green 	The wireless PC Card has a connection with another wireless node.	The wireless PC Card has established good communication with an access point and the signal quality is strong.



## WG511v2 LEDs

The two LEDs on the NETGEAR 54 Mbps Wireless PC Card WG511v2 indicate the condition of wireless link.



Figure 1-10

LED	Activity	Description
Link - Green	On Blinking	The card is plugged in to the notebook PC. Blinking indicates the WG511 is trying to establish a connection but is unable to do so.
Activity - Amber	On/Blinking Off	The WG511 has a connection and is transmitting or receiving data. There is no data transmission on the wireless network.

## Removing the WG511v2 Software

You can remove the wireless adapter software in these two ways:

- Navigate the Windows Start menu to the WG511v2 Wireless PC Card program group, select the uninstall option, and follow the screen prompts.
- Navigate the Windows Start menu to the Control Panel Add or Remove Program item, select the WG511v2 Wireless PC Card option, and follow the screen prompts.

## Upgrading the WG511v2 Software

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Upgrades may be available at the NETGEAR website. To install an upgrade, follow these steps.

1. Write down the settings for any profiles that you want to save. They will not be retained.
2. Download the upgrade from the NETGEAR website Support page.
3. Remove the WG511v2 software from your laptop computer.
4. Remove the WG511v2 adapter from your laptop computer, and if prompted restart your laptop computer.
5. Run the installer that you downloaded (the file ends in .exe).
6. Follow the installer instructions, and if prompted, then restart your laptop computer.